STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 97945

TO: Ted Criares
Location: CM1/2A03/
Art Unit: 1617
Thursday, July 03, 2003

Case Serial Number: 029314

From: Mary Jane Ruhl
Location: Biotech-Chem Library
CM1-6A06
Phone: 605-1155

maryjane.ruhl@uspto.gov

Search Notes

Examiner Criares,

Here are the results from your recent search request.

Please feel free to contact me if you have any questions about these results.

Thank you for using STIC services. We appreciate the opportunity to serve you.

Sincerely,

Mary Jane Ruhl
Technical Information Specialist
STIC
CM-1, Rm. 6-A-06
605-1155

=> d his ful

(FILE 'HOME' ENTERED AT 11:55:29 ON 03 JUL 2003)

FILE 'REGISTRY' ENTERED AT 11:55:49 ON 03 JUL 2003

L1 STRUCTURE
L2 2 SEA SSS SAM L1
L3 5 SEA SSS FUL L1
L4 3 SEA ABB=ON L3 NOT L2
L5 STR L1
L6 7 SEA SSS SAM L5
L7 107 SEA SSS FUL L5
L8 STR L5
L9 1 SEA SSS SAM L8
L10 6 SEA SSS FUL L8
L11 STR L5
L12 7 SEA SSS SAM L11
L13 107 SEA SSS FUL L11
L14 64 SEA ABB=ON L13 AND NR=4 AND NRS=4
L15 4 SEA ABB=ON L14 AND O=4 AND N=4
~~L16 5 SEA ABB=ON (387825-75-4 OR 391610-67-6 OR 391610-68-7 OR 497107-87-6 OR 252002-40-7)/RN~~

I did a combination of structure & dictionary searching to locate the 2 compds

FILE 'HCAPLUS' ENTERED AT 12:20:55 ON 03 JUL 2003
~~L17 6 SEA ABB=ON L16~~

FILE 'REGISTRY' ENTERED AT 12:21:52 ON 03 JUL 2003
L18 2 SEA ABB=ON (391610-68-7 OR 497107-87-6)/RN

The 2 elected species — see attached structures

FILE 'HCAPLUS' ENTERED AT 12:23:15 ON 03 JUL 2003
L19 3 SEA ABB=ON L18
L20 3 SEA ABB=ON L19 AND (?OBES? OR ?ANOREX? OR ?BULEM?)

3 cit's from CA Plus

FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO' ENTERED AT 12:24:12 ON 03 JUL 2003
L21 1 SEA ABB=ON L20

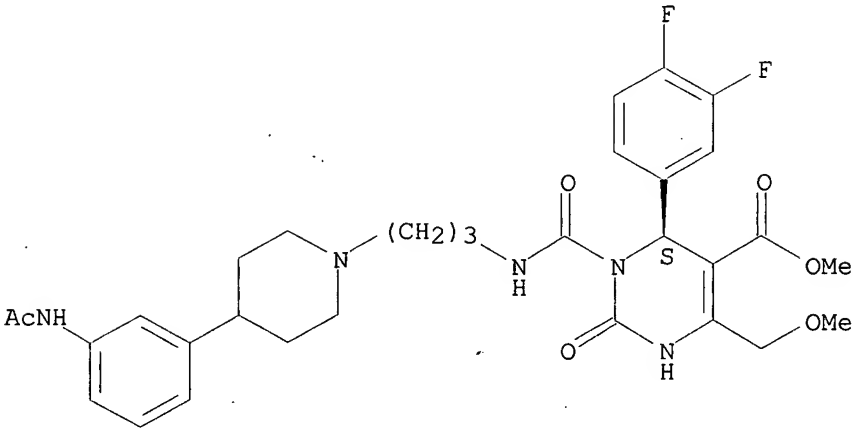
1 cit from "other db's"

Structures for the 2 elected species.

=> d l18 1-2
YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y

L18 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2003 ACS
RN **497107-87-6** REGISTRY
CN 5-Pyrimidinecarboxylic acid, 1-[[[3-[4-[3-(acetylamino)phenyl]-1-piperidinyl]propyl]amino]carbonyl]-6-(3,4-difluorophenyl)-1,2,3,6-tetrahydro-4-(methoxymethyl)-2-oxo-, methyl ester, monohydrochloride, (6S)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN SNAP 7941
FS STEREOSEARCH
MF C31 H37 F2 N5 O6 . Cl H
SR CA
LC STN Files: BIOSIS, CA, CAPLUS
CRN (387825-78-7)

Absolute stereochemistry. Rotation (+).

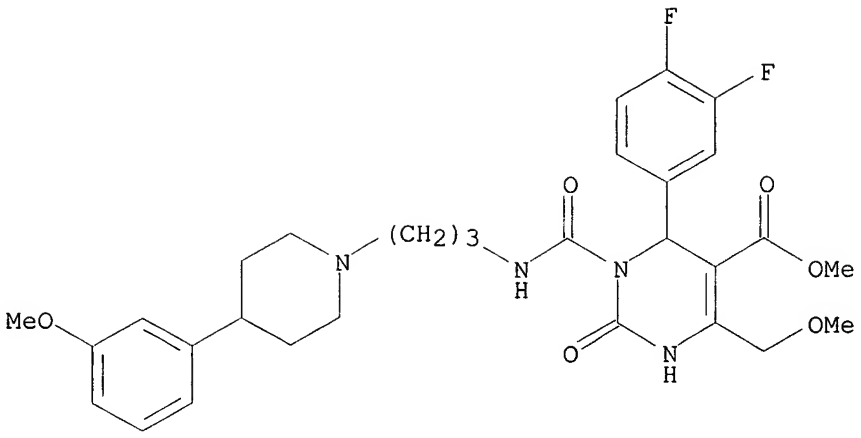


● HCl

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L18 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2003 ACS
RN **391610-68-7** REGISTRY
CN 5-Pyrimidinecarboxylic acid, 6-(3,4-difluorophenyl)-1,2,3,6-tetrahydro-4-(methoxymethyl)-1-[[[3-[4-(3-methoxyphenyl)-1-piperidinyl]propyl]amino]carbonyl]-2-oxo-, methyl ester, (+)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C30 H36 F2 N4 O6
CI COM
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

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=> d que stat l20
L18             2 SEA FILE=REGISTRY ABB=ON  (391610-68-7 OR 497107-87-6)/RN
L19             3 SEA FILE=HCAPLUS ABB=ON  L18
L20             3 SEA FILE=HCAPLUS ABB=ON  L19 AND (?OBES? OR ?ANOREX? OR
                  ?BULEM?)

=> d ibib abs hitrn l20 1-3

L20  ANSWER 1 OF 3  HCAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2003:282121  HCAPLUS
DOCUMENT NUMBER:          138:287697
TITLE:                    Preparation and use of arylpyrimidines as selective
                          melanin concentrating hormone-1 (mch-1) receptor
                          antagonists
INVENTOR(S):              Marzabadi, Mohammad R.; Wetzel, John; Deleon, John E.;
                          Lagu, Bharat; Gluchowski, Charles; Noble, Stewart;
                          Nagarathnam, Dhanapalan
PATENT ASSIGNEE(S):       USA
SOURCE:                   U.S. Pat. Appl. Publ., 101 pp.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     ---------------   ----  --------       ---------------  --------
     US 2003069261      A1   20030410       US 2001-899635   20010705
PRIORITY APPLN. INFO.:                   US 2000-216218P  P  20000705
OTHER SOURCE(S):          MARPAT 138:287697
GI
```

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I-IV [A = (un)substituted Ph, pyridyl, benzothiazolyl, benzoxazolyl, etc.; R1 = H, NO2, CN, (fluoro)alkyl, (cyclo)alkenyl, alkynyl, (fluoro)cycloalkyl, amino, alkoxy, acyl, carboxy, carboxamido; R2 = H, (hydroxy)alkyl, alkoxyalkyl, fluoroalkyl, cycloalkenyl, etc.; R3 = H, (fluoro)alkyl, (cyclo)alkenyl, alkynyl, (fluoro)cycloalkyl; R4 = alkyl-piperidinyl, alkyl-tetrahydropyridinyl, etc. in which the heterocycle is substituted with (hetero)aryl, thioacyl, amido, etc.; X = O, S, NR3; n = 0 - 5] were prepd. For instance, (+)-V was prepd. by reaction of 5-methoxycarbonyl-4-methoxymethyl-1,2,3,6-tetrahydro-2-oxo-6-(3,4-difluorophenyl)-1-[(4-nitrophenyloxy)carbonyl]pyrimidine (prepn. given) and the corresponding propylamine sidechain with base (e.g., iPr2NEt) in CH2Cl2. (+)-V had antagonist potency (Kb) = 0.3 nM and Ki = 0.08 nM for the melanin-concg. hormone receptor (mch) and Ki > 50,000 nM for two neuropeptide Y receptors and Ki > 50,000 nM three galanin receptors. I-IV are useful in the treatment of, e.g., bulimia nervosa and **obesity**.

IT **391610-68-7P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and use of arylpyrimidines as selective melanin concg. hormone-1 (mch-1) receptor antagonists)

L20 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:569549 HCAPLUS
DOCUMENT NUMBER: 138:163330
TITLE: Antidepressant, anxiolytic and anorectic effects of a melanin-concentrating hormone-1 receptor antagonist
AUTHOR(S): Borowsky, Beth; Durkin, Margaret M.; Ogozalek, Kristine; Marzabadi, Mohammad R.; DeLeon, John; Heurich, Rainer; Lichtblau, Harvey; Shaposhnik, Zoya; Daniewska, Irena; Blackburn, Thomas P.; Branchek, Theresa A.; Gerald, Christophe; Vaysse, Pierre J.; Forray, Carlos
CORPORATE SOURCE: Synaptic Pharmaceutical Corporation, Paramus, NJ, USA
SOURCE: Nature Medicine (New York, NY, United States) (2002), 8(8), 825-830
CODEN: NAMEFI; ISSN: 1078-8956
PUBLISHER: Nature Publishing Group
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Melanin concg. hormone (MCH) is an orexigenic hypothalamic neuropeptide, which plays an important role in the complex regulation of energy balance and body wt. Here we show that SNAP-7941, a selective, high-affinity MCH1 receptor (MCH1-R) antagonist, inhibited food intake stimulated by central administration of MCH, reduced consumption of palatable food, and, after chronic administration to rats with diet-induced **obesity**, resulted in a marked, sustained decrease in body wt. In addn., after mapping the binding sites for [3H]SNAP-7941 in rat brain, we evaluated its effects in a series of behavioral models. SNAP-7941 produced effects similar to clin. used antidepressants and anxiolytics in three animal models of depression/anxiety: the rat forced-swim test, rat social interaction and guinea pig maternal-sepn. vocalization tests. Given these observations, an MCH1-R antagonist may be useful not only in the management of **obesity** but also as a treatment for depression and/or anxiety.
IT **497107-87-6**, SNAP 7941
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antidepressant, anxiolytic and anorectic effects of melanin-concg. hormone-1 receptor antagonist SNAP-7941)
REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:72060 HCAPLUS
DOCUMENT NUMBER: 136:134773
TITLE: Preparation and use of arylpyrimidines as selective melanin concentrating hormone-1 (mch-1) receptor antagonists
INVENTOR(S): Lagu, Bharat; Wetzel, John; Marzabadi, Mohammad R.; Deleon, John E.; Gluchowski, Charles; Noble, Stewart; Nagarathnam, Dhanapalan; Chiu, George
PATENT ASSIGNEE(S): Synaptic Pharmaceutical Corporation, USA
SOURCE: PCT Int. Appl., 310 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2002006245	A1	20020124	WO 2001-US21286 20010705
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM		
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG		
EP 1299362	A1	20030409	EP 2001-952440 20010705
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR		

PRIORITY APPLN. INFO.: US 2000-610213 A 20000705
WO 2001-US21286 W 20010705

OTHER SOURCE(S): MARPAT 136:134773
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I-IV [A = (un)substituted Ph, pyridyl, benzothiazolyl, benzoxazolyl, etc.; R1 = H, NO2, CN, (fluoro)alkyl, (cyclo)alkenyl, alkynyl, (fluoro)cycloalkyl, amino, alkoxy, acyl, carboxy, carboxamido; R2 = H, (hydroxy)alkyl, alkoxyalkyl, fluoroalkyl, cycloalkenyl, etc.; R3 = H, (fluoro)alkyl, (cyclo)alkenyl, alkynyl, (fluoro)cycloalkyl; R4 = alkyl-piperidinyl, alkyl-tetrahydropyridinyl, etc. in which the heterocycle is substituted with (hetero)aryl, thioacyl, amido, etc.; X = O, S, NR3; n = 0 - 5] were prepd. For instance, (+)-V was prepd. by reaction of 5-methoxycarbonyl-4-methoxymethyl-1,2,3,6-tetrahydro-2-oxo-6-(3,4-difluorophenyl)-1-[(4-nitrophenyloxy)carbonyl]pyrimidine (prepn. given) and the corresponding propylamine sidechain with base (e.g., iPr2NEt) in CH2Cl2. (+)-V had antagonist potency (Kb) = 0.3 nM and Ki = 0.08 nM for the melanin-concg. hormone receptor (mch) and Ki > 50,000 nM for two neuropeptide Y receptors and Ki > 50,000 nM three galanin receptors. I-IV are useful in the treatment of, e.g., bulimia nervosa and **obesity**.

IT **391610-68-7P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and use of arylpyrimidines as selective melanin concg. hormone-1 (mch-1) receptor antagonists)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L18             2 SEA FILE=REGISTRY ABB=ON  (391610-68-7 OR 497107-87-6)/RN
L19             3 SEA FILE=HCAPLUS ABB=ON  L18
L20             3 SEA FILE=HCAPLUS ABB=ON  L19 AND (?OBES? OR ?ANOREX? OR
                  ?BULEM?)
L21             1 SEA L20

=> d ibib abs l21 1-1

L21  ANSWER 1 OF 1  BIOSIS  COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER:   2003:294799  BIOSIS
DOCUMENT NUMBER:    PREV200300294799
TITLE:              ANORECTIC, ANXIOLYTIC AND ANTIDEPRESSANT EFFECTS OF A
                    MELANIN - CONCENTRATING HORMONE1 RECEPTOR ANTAGONIST.
AUTHOR(S):          Wolinsky, T. D. (1); Borowsky, B. (1); Ogozalek, O. (1);
                    Lichtblau, H. (1); Marzabadi, M. (1); Blackburn, T. P. (1);
                    Branchek, T. A. (1); Vaysse, P. J. (1); Gerald, C. (1);
                    Forray, C. (1)
CORPORATE SOURCE:   (1) Synaptic Pharmaceutical Corp., Paramus, NJ, USA USA
SOURCE:             Society for Neuroscience Abstract Viewer and Itinerary
                    Planner, (2002) Vol. 2002, pp. Abstract No. 384.11.
                    http://sfn.scholarone.com. cd-rom.
                    Meeting Info.: 32nd Annual Meeting of the Society for
                    Neuroscience Orlando, Florida, USA November 02-07, 2002
                    Society for Neuroscience
                    .
DOCUMENT TYPE:      Conference
LANGUAGE:           English
AB   The hypothalamic neuropeptide melanin-concentrating hormone (MCH) is
     important in the regulation of energy homeostasis and body weight.
     Although several lines of investigation support a rationale for the use of
     MCH antagonists in the treatment of obesity, it is not clear
     whether there is sufficient endogenous MCH tone to produce sustained loss
     of body weight after chronic MCH blockade. We evaluated SNAP 7941, a high
     affinity, selective MCH1 receptor (MCH1-R) antagonist in the diet-induced
     obesity model in rats. Robust and sustained decreases in food
     intake and body weight were observed which could not be attributed to
     malaise caused by the compound. Because MCH has also been implicated in
     the regulation of anxiety and mood, the compound was assessed in a variety
     of animal models. SNAP 7941 reduced the number of vocalizations produced
     by guinea pig pups during a period of maternal separation in a manner
     comparable to the anxiolytic buspirone. In further support of its possible
     use as an anxiolytic, pretreatment with SNAP 7941 increased the degree of
     social behavior displayed by pairs of unfamiliar rats in the social
     interaction test. Similar to the profile of clinically used
     antidepressants, SNAP 7941 decreased immobility in the rat forced swim
     test. These findings support the utility of an MCH1-R antagonist for the
     management of obesity and highlight its potential for the
     treatment of anxiety and/or depression.
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=> d que stat l20
L18             2 SEA FILE=REGISTRY ABB=ON  (391610-68-7 OR 497107-87-6)/RN
L19             3 SEA FILE=HCAPLUS ABB=ON  L18
L20             3 SEA FILE=HCAPLUS ABB=ON  L19 AND (?OBES? OR ?ANOREX? OR
                  ?BULEM?)

=> d que stat l21
L18             2 SEA FILE=REGISTRY ABB=ON  (391610-68-7 OR 497107-87-6)/RN
L19             3 SEA FILE=HCAPLUS ABB=ON  L18
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                  ?BULEM?)
L21             1 SEA L20
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=> d ibib abs 130 1-4

L30 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2003:64296 HCAPLUS
DOCUMENT NUMBER: 138:314672
TITLE: The MCH receptor family: feeding brain disorders?
AUTHOR(S): **Forray, Carlos**
CORPORATE SOURCE: Synaptic Pharmaceutical Corporation, Paramus, NJ, 07652, USA
SOURCE: Current Opinion in Pharmacology (2003), 3(1), 85-89
CODEN: COPUBK; ISSN: 1471-4892
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review. The importance of melanin concg. hormone (MCH) in the control of energy balance has been confirmed by findings of lean phenotypes of mice with targeted deletion of the melanin concg. hormone receptor 1 (**MCH1**-R). The recent publications of anorectic and **antiobesity** effects of the first two selective **MCH1**-R antagonists have confirmed the notion that pharmacol. blockade of **MCH1**-R is a viable therapeutic approach for **obesity**. In addn., **MCH1**-R antagonists have been found to have antidepressant and anxiolytic properties.
REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:569549 HCAPLUS
DOCUMENT NUMBER: 138:163330
TITLE: Antidepressant, anxiolytic and anorectic effects of a melanin-concentrating hormone-1 receptor antagonist
AUTHOR(S): Borowsky, Beth; Durkin, Margaret M.; Ogozalek, Kristine; Marzabadi, Mohammad R.; DeLeon, John; Heurich, Rainer; Lichtblau, Harvey; Shaposhnik, Zoya; Daniewska, Irena; Blackburn, Thomas P.; Branchek, Theresa A.; Gerald, Christophe; Vaysse, Pierre J.; **Forray, Carlos**
CORPORATE SOURCE: Synaptic Pharmaceutical Corporation, Paramus, NJ, USA
SOURCE: Nature Medicine (New York, NY, United States) (2002), 8(8), 825-830
CODEN: NAMEFI; ISSN: 1078-8956
PUBLISHER: Nature Publishing Group
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Melanin concg. hormone (MCH) is an orexigenic hypothalamic neuropeptide, which plays an important role in the complex regulation of energy balance and body wt. Here we show that SNAP-7941, a selective, high-affinity **MCH1** receptor (**MCH1**-R) antagonist, inhibited food intake stimulated by central administration of MCH, reduced consumption of palatable food, and, after chronic administration to rats with diet-induced **obesity**, resulted in a marked, sustained decrease in body wt. In addn., after mapping the binding sites for [3H]SNAP-7941 in rat brain, we evaluated its effects in a series of behavioral models. SNAP-7941 produced effects similar to clin. used antidepressants and anxiolytics in three animal models of depression/anxiety: the rat forced-swim test, rat social interaction and guinea pig maternal-sepn. vocalization tests. Given these observations, an **MCH1**-R antagonist may be useful not only in the management of **obesity** but also as a treatment for depression and/or anxiety.
REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:31619 HCAPLUS
DOCUMENT NUMBER: 136:96697
TITLE: Human melanin concentrating hormone receptor **MCH1**, its DNA, its synthetic ligands and diagnostic and therapeutic uses thereof
INVENTOR(S): **Salon, John A.; Laz, Thomas M.; Nagorny, Raisa; Wilson, Amy E.**
PATENT ASSIGNEE(S): Synaptic Pharmaceutical Corporation, USA
SOURCE: PCT Int. Appl., 524 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002002744	A2	20020110	WO 2001-US21350	20010705
WO 2002002744	A3	20020808		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1246847	A2	20021009	EP 2001-952456	20010705
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.: US 2000-610635 A 20000705
WO 2001-US21350 W 20010705

AB This invention provides an isolated nucleic acid encoding a human **MCH1** receptor, a purified human **MCH1** receptor, vectors comprising isolated nucleic acid encoding a human **MCH1** receptor, cells comprising such vectors, antibodies directed to a human **MCH1** receptor, nucleic acid **probes** useful for detecting nucleic acid encoding human **MCH1** receptors, antisense oligonucleotides complementary to unique sequence of nucleic acid encoding human **MCH1** receptors, transgenic, nonhuman animals which express DNA encoding a normal or mutant human **MCH1** receptor, methods of isolating a human **MCH1** receptor, methods of treating an abnormality that is linked to the activity of a human **MCH1** receptor, as well as methods of detg. binding of compds. to mammalian **MCH1** receptors. This invention provides a method of modifying the feeding behavior of a subject which comprises administering to the subject an amt. of an **MCH1** antagonist effective to decrease the body mass of the subject and/or decrease the consumption of food by the subject. This invention further provides a method of treating a subject suffering from depression and/or anxiety which comprises administering to the subject an amt. of an **MCH1** antagonist effective to treat the subject's depression and/or anxiety.

L30 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:457194 HCAPLUS
DOCUMENT NUMBER: 133:85156

TITLE: Human melanin concentrating hormone receptor **MCH1** and cDNA and diagnostic and therapeutic uses thereof

INVENTOR(S): **Salon, John A.; Laz, Thomas M.; Nagorny, Raisa; Wilson, Amy E.**

PATENT ASSIGNEE(S): Synaptic Pharmaceutical Corporation, USA

SOURCE: PCT Int. Appl., 173 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000039279	A2	20000706	WO 1999-US31169	19991230
WO 2000039279	A3	20001102		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6221613	B1	20010424	US 1998-224426	19981231
CA 2358687	AA	20000706	CA 1999-2358687	19991230
EP 1141020	A2	20011010	EP 1999-969993	19991230
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002533116	T2	20021008	JP 2000-591172	19991230
US 6221616	B1	20010424	US 2000-478601	20000106
US 6291195	B1	20010918	US 2000-478602	20000106
US 2002111306	A1	20020815	US 2001-885478	20010620
US 2003082623	A1	20030501	US 2001-899732	20010705
US 2003077701	A1	20030424	US 2001-29314	20011220

PRIORITY APPLN. INFO.:

US 1998-224426	A2	19981231
WO 1999-US31169	W	19991230
US 2000-610635	A2	20000705
US 2001-899732	A1	20010705

AB This invention provides an isolated nucleic acid encoding a human **MCH1** receptor; a purified human **MCH1** receptor; vectors comprising isolated nucleic acid encoding a human **MCH1** receptor; cells comprising such vectors; antibodies directed to a human **MCH1** receptor; nucleic acid **probes** useful for detecting nucleic acid encoding human **MCH1** receptors; antisense oligonucleotides complementary to unique sequences of nucleic acid encoding human **MCH1** receptors; transgenic, nonhuman animals which express DNA encoding a normal or mutant human **MCH1** receptor; methods of isolating a human **MCH1** receptor; methods of treating an abnormality that is linked to the activity of a human **MCH1** receptor; and methods of detg. binding of compds. to mammalian **MCH1** receptors. Thus, the cDNA for human **MCH1** was cloned and sequenced. Treatment of recombinant COS-7 cells expressing human **MCH1** with MCH resulted in stimulation of intracellular inositol phosphate release as well as stimulation of expression of a c-fos-regulated reporter gene. CHO cells producing **MCH1** exhibited a dose-dependent increase in acidification rate when treated with MCH. MRNA encoding the human **MCH1** was widespread

throughout all tissues assayed, including both CNS and peripheral organs.